

PCT09

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/743,731

DATE: 06/18/2001  
 TIME: 16:26:00

Input Set : A:\08106-004001.TXT  
 Output Set: N:\CRF3\06182001\I743731.raw

ENTERED

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4 <110> APPLICANT: Smit, John
6 <120> TITLE OF INVENTION: CLEAVAGE OF CAULOBACTER PRODUCED
7 RECOMBINANT FUSION PROTEINS
9 <130> FILE REFERENCE: 08106-004001
11 <140> CURRENT APPLICATION NUMBER: 09/743,731
C--> 12 <141> CURRENT FILING DATE: 2001-04-25
14 <150> PRIOR APPLICATION NUMBER: PCT/CA99/00637
15 <151> PRIOR FILING DATE: 1999-07-14
17 <150> PRIOR APPLICATION NUMBER: CA 2,237,704
18 <151> PRIOR FILING DATE: 1998-07-14
20 <160> NUMBER OF SEQ ID NOS: 11
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 15
26 <212> TYPE: PRT
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Fusion protein
32 <400> SEQUENCE: 1
33 Leu Ser Glu Ile Lys Gly Val Ile Val His Arg Leu Glu Gly Val
34 1 5 10 15
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 15
38 <212> TYPE: PRT
39 <213> ORGANISM: Artificial Sequence
41 <220> FEATURE:
42 <223> OTHER INFORMATION: Fusion protein
44 <400> SEQUENCE: 2
45 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu
46 1 5 10 15
48 <210> SEQ ID NO: 3
49 <211> LENGTH: 12
50 <212> TYPE: PRT
51 <213> ORGANISM: Artificial Sequence
53 <220> FEATURE:
54 <223> OTHER INFORMATION: Synthetically generated peptide
56 <400> SEQUENCE: 3
57 Ser Pro Leu Gly Pro Ala Gly Asp Pro Glu Ala Ser
58 1 5 10
60 <210> SEQ ID NO: 4
61 <211> LENGTH: 3300
62 <212> TYPE: DNA
63 <213> ORGANISM: Caulobacter crescentus
65 <220> FEATURE:
66 <221> NAME/KEY: CDS
67 <222> LOCATION: (101)...(3179)
69 <400> SEQUENCE: 4

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70	gctattgtcg acgtatgacg	tttgctctat agccatcgct	gctcccatgc ggc	cactcg	60	
71	gtcgcagggg	gtgtgggatt	tttttggga	gacaatcctc atg	gcc tat acg acg	115
72					Met Ala Tyr Thr Thr	
73					1 5	
75	gcc cag ttg gtg act	gct acc aac	gcc aac ctc	ggc aag	gct cct	163
76	Ala Gln Leu Val	Thr Ala Tyr Thr Asn	Ala Asn Leu	Gly Lys Ala	Pro	
77	10	15	20			
79	gac gcc acc acg	ctg acg	ctc gac	gct tac	gctg act caa acc	211
80	Asp Ala Ala Thr	Leu Thr Leu Asp	Ala Tyr Ala	Thr Gln	Thr Gln	
81	25	30	35			
83	acg ggc ggc	ctc tcg	gac gct	gct ctg	acc aac acc	259
84	Thr Gly Gly	Leu Ser Asp	Ala Ala Leu	Thr Asn	Thr Leu Lys Leu	
85	40	45	50			
87	gtc aac agc acg	acg gct	gtt gcc	atc cag	acc tac cag ttc	307
88	Val Asn Ser	Thr Thr Ala Val	Ala Ile	Gln Thr	Tyr Gln Phe	Phe Thr
89	55	60	65			
91	ggc gtt gcc	ccg tcg	gcc gct	ggt ctg	gac ttc	355
92	Gly Val Ala Pro	Ser Ala Ala Gly	Leu Asp	Phe Leu	Val Asp Ser	Thr
93	70	75	80	85		
95	acc aac acc aac	gac ctg	aac gac	gct tac	tac tcg aag	403
96	Thr Asn Thr Asn	Asp Leu Asn	Asp Ala Tyr	Tyr Ser	Lys Phe Ala	Gln
97	90	95	100			
99	gaa aac cgc	ttc atc	aatc ttc	tcg atc	aac ctg	451
100	Glu Asn Arg	Phe Ile Asn Phe	Ser Ile Asn	Leu Ala	Thr Gly Ala	Gly
101	105	110	115			
103	gcc ggc	gct acg	gtt ttc	gcc gct	acg ggc	499
104	Ala Gly Ala	Thr Ala Phe	Ala Ala Tyr	Thr Gly	Val Ser	Tyr Ala
105	120	125	130			
107	cag acg gtc	gcc acc	gcc tat	gac aag	atc atc	547
108	Gln Thr Val	Ala Ala Thr	Ala Tyr Asp	Lys Ile	Gly Asn	Ala Val Ala
109	135	140	145			
111	acc gcc	gct ggc	gtc gac	gtc gct	gcc gtc	595
112	Thr Ala Ala	Gly Val Asp	Val Ala Ala	Val Ala	Phe Leu	Ser Arg
113	150	155	160	165		
115	cag gcc	acc atc	gac tac	ctg acc	gcc ttc	643
116	Gln Ala Asn	Ile Asp Tyr	Leu Thr Ala	Phe Val	Arg Ala Asn	Thr Pro
117	170	175	180			
119	ttc acg	gcc gct	gcc gac	atc gat	ctg gcc	739
120	Phe Thr Ala	Ala Ala Asp	Ile Asp	Leu Ala	Val Lys	Ala Ala Leu Ile
121	185	190	195			
123	ggc acc	atc ctg	aac gcc	gcc acg	gtg tcg	787
124	Gly Thr Ile	Leu Asn Ala	Ala Thr Val	Ser Gly	Ile Gly	Gly Tyr Ala
125	200	205	210			
127	acc gcc	acg gcc	gct atg	atc aac	gac ctg	835
128	Thr Ala	Thr Ala Ala	Met Ile	Asn Asp	Leu Ser	Asp Gly Ala Leu Ser
129	215	220	225			
131	acc gac	aac gcg	gct ggc	gtg aac	ctg ttc	240
132	Thr Asp Asn	Ala Ala Gly	Val Asn	Leu Phe	Thr Ala Tyr	Pro Ser Ser
133	230	235	245			

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135 ggc gtg tcg ggt tcg acc ctc tcg ctg acc acc ggc acc gac acc ctg	883
136 Gly Val Ser Gly Ser Thr Leu Ser Leu Thr Thr Gly Thr Asp Thr Leu	
137 250 255 260	
139 acg ggc acc gcc aac aac gac acg ttc gtt gcg ggt gaa gtc gcc ggc	931
140 Thr Gly Thr Ala Asn Asn Asp Thr Phe Val Ala Gly Glu Val Ala Gly	
141 265 270 275	
143 gct gcg acc ctg acc gtt ggc gac acc ctg acg ggc ggt gct ggc acc	979
144 Ala Ala Thr Leu Thr Val Gly Asp Thr Leu Ser Gly Gly Ala Gly Thr	
145 280 285 290	
147 gac gtc ctg aac tgg gtg caa gct gct gcg gtt acg gct ctg ccg acc	1027
148 Asp Val Leu Asn Trp Val Gln Ala Ala Val Thr Ala Leu Pro Thr	
149 295 300 305	
151 ggc gtg acg atc tcg ggc atc gaa acg atg aac gtg acg tcg ggc gct	1075
152 Gly Val Thr Ile Ser Gly Ile Glu Thr Met Asn Val Thr Ser Gly Ala	
153 310 315 320 325	
155 gcg atc acc ctg aac acg tct tcg ggc gtg acg ggt ctg acc gcc ctg	1123
156 Ala Ile Thr Leu Asn Thr Ser Ser Gly Val Thr Gly Leu Thr Ala Leu	
157 330 335 340	
159 aac acc aac acc agc ggc gcg gct caa acc gtc acc gcc ggc gct ggc	1171
160 Asn Thr Asn Thr Ser Gly Ala Ala Gln Thr Val Thr Ala Gly Ala Gly	
161 345 350 355	
163 cag aac ctg acc gcc acg acc gcc gct caa gcc gcg aac aac gtc gcc	1219
164 Gln Asn Leu Thr Ala Thr Ala Ala Gln Ala Ala Asn Asn Val Ala	
165 360 365 370	
167 gtc gac ggg cgc gcc aac gtc acc gtc gcc tcg acg ggc gtg acc tcg	1267
168 Val Asp Gly Arg Ala Asn Val Thr Val Ala Ser Thr Gly Val Thr Ser	
169 375 380 385	
171 ggc acg acc acg gtc ggc aac tcg gcc gct tcg ggc acc gtg tcg	1315
172 Gly Thr Thr Val Gly Ala Asn Ser Ala Ala Ser Gly Thr Val Ser	
173 390 395 400 405	
175 gtc agc gtc gcg aac tcg acg acg acc acc acg ggc gct atc gcc gtg	1363
176 Val Ser Val Ala Asn Ser Ser Thr Thr Thr Gly Ala Ile Ala Val	
177 410 415 420	
179 acc ggt ggt acg gcc gtc acc gtc gct caa acg gcc ggc aac gcc gtg	1411
180 Thr Gly Gly Thr Ala Val Thr Val Ala Gln Thr Ala Gly Asn Ala Val	
181 425 430 435	
183 aac acc acg ttg acg caa gcc gac gtc acc gtc acc ggt aac tcc acg	1459
184 Asn Thr Thr Leu Thr Gln Ala Asp Val Thr Val Thr Gly Asn Ser Ser	
185 440 445 450	
187 acc acg gcc gtc acg gtc acc caa acc gcc gcc acc gcc ggc gct	1507
188 Thr Thr Ala Val Thr Val Gln Thr Ala Ala Thr Ala Gly Ala	
189 455 460 465	
191 acg gtc gcc ggt cgc gtc aac ggc gct gtc acg atc acc gac tct gcc	1555
192 Thr Val Ala Gly Arg Val Asn Gly Ala Val Thr Ile Thr Asp Ser Ala	
193 470 475 480 485	
195 gcc gcc tcg gcc acg acc gcc ggc aag atc gcc acg gtc acc ctg ggc	1603
196 Ala Ala Ser Ala Thr Thr Ala Gly Lys Ile Ala Thr Val Thr Leu Gly	
197 490 495 500	
199 agc ttc ggc gcc acg atc gac tcg acg gct ctg acg acc gtc aac	1651

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200 Ser Phe Gly Ala Ala Thr Ile Asp Ser Ser Ala Leu Thr Thr Val Asn			
201 505	510	515	
203 ctg tcg ggc acg ggc acc tcg ctc ggc atc ggc cgc ggc gct ctg acc			1699
204 Leu Ser Gly Thr Gly Thr Ser Leu Gly Ile Gly Arg Gly Ala Leu Thr			
205 520	525	530	
207 gcc acg ccg acc gcc aac acc ctg acc ctg aac gtc aat ggt ctg acg			1747
208 Ala Thr Pro Thr Ala Asn Thr Leu Thr Leu Asn Val Asn Gly Leu Thr			
209 535	540	545	
211 acg acc ggc gcg atc acg gac tcg gaa gcg gct gct gac gat ggt ttc			1795
212 Thr Thr Gly Ala Ile Thr Asp Ser Glu Ala Ala Asp Asp Gly Phe			
213 550	555	560	565
215 acc acc atc aac atc gct ggt tcg acc gcc tct tcg acg atc gcc agc			1843
216 Thr Thr Ile Asn Ile Ala Gly Ser Thr Ala Ser Ser Thr Ile Ala Ser			
217 570	575	580	
219 ctg gtg gcc gcc gac gcg acg acc ctg aac atc tcg ggc gac gct cgc			1891
220 Leu Val Ala Ala Asp Ala Thr Thr Leu Asn Ile Ser Gly Asp Ala Arg			
221 585	590	595	
223 gtc acg atc acc tcg cac acc gct gcc gcc ctg acg ggc atc acg gtg			1939
224 Val Thr Ile Thr Ser His Thr Ala Ala Ala Leu Thr Gly Ile Thr Val			
225 600	605	610	
227 acc aac acg gtt ggt gcg acc ctc ggc gcc gaa ctg gcg acc ggt ctg			1987
228 Thr Asn Ser Val Gly Ala Thr Leu Gly Ala Glu Leu Ala Thr Gly Leu			
229 615	620	625	
231 gtc ttc acg ggc ggc gct ggc cgt gac tcg atc ctg ctg ggc gcc acg			2035
232 Val Phe Thr Gly Gly Ala Gly Arg Asp Ser Ile Leu Leu Gly Ala Thr			
233 630	635	640	645
235 acc aag gcg atc gtc atg ggc gcc ggc gac gac acc gtc acc gtc agc			2083
236 Thr Lys Ala Ile Val Met Gly Ala Gly Asp Asp Thr Val Thr Val Ser			
237 650	655	660	
239 tcg gcg acc ctg ggc gct ggt ggt tcg gtc aac ggc ggc gac ggc acc			2131
240 Ser Ala Thr Leu Gly Ala Gly Ser Val Asn Gly Gly Asp Gly Thr			
241 665	670	675	
243 gac gtt ctg gtg gcc aac gtc aac ggt tcg tcg ttc agc gct gac ccg			2179
244 Asp Val Leu Val Ala Asn Val Asn Gly Ser Ser Phe Ser Ala Asp Pro			
245 680	685	690	
247 gcc ttc ggc ggc ttc gaa acc ctc cgc gtc gct ggc gcg gcg gct caa			2227
248 Ala Phe Gly Gly Phe Glu Thr Leu Arg Val Ala Gly Ala Ala Ala Gln			
249 695	700	705	
251 ggc tcg cac aac gcc aac ggc ttc acg gct ctg cca ctg ggc gcg acg			2275
252 Gly Ser His Asn Ala Asn Gly Phe Thr Ala Leu Gln Leu Gly Ala Thr			
253 710	715	720	725
255 gcg ggt gcg acg acc ttc acc aac gtt gcg gtg aat gtc ggc ctg acc			2323
256 Ala Gly Ala Thr Thr Phe Thr Asn Val Ala Val Asn Val Gly Leu Thr			
257 730	735	740	
259 gtt ctg gcg gct ccg acc ggt acg acg acc gtg acc ctg gcc aac gcc			2371
260 Val Leu Ala Ala Pro Thr Gly Thr Thr Val Thr Leu Ala Asn Ala			
261 745	750	755	
263 acg ggc acc tcg gac gtg ttc aac ctg acc ctg tcg tcc tcg gcc gct			2419
264 Thr Gly Thr Ser Asp Val Phe Asn Leu Thr Leu Ser Ser Ala Ala			

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265	760	765	770														
267	ctg	gcc	gct	ggc	gtt	acg	gtc	gag	acg	gtg	aac	atc	2467				
268	Leu	Ala	Ala	Gly	Thr	Val	Ala	Leu	Ala	Gly	Val	Glu	Thr	Val	Asn	Ile	
269	775		780		785												
271	gcc	gcc	acc	gac	acc	aac	acg	acc	gct	cac	gtc	gac	acg	ctg	acg	ctg	2515
272	Ala	Ala	Thr	Asp	Thr	Asn	Thr	Thr	Ala	His	Val	Asp	Thr	Leu	Thr	Leu	
273	790		795		800		805										
275	caa	gcc	acc	tcg	gcc	aag	tcg	atc	gtg	gtg	acg	ggc	aac	gcc	ggc	ctg	2563
276	Gln	Ala	Thr	Ser	Ala	Lys	Ser	Ile	Val	Val	Thr	Gly	Asn	Ala	Gly	Leu	
277																	
279	810		815		820												
280	aac	ctg	acc	acc	ggc	aac	acg	gct	gtc	acc	acg	tcc	gac	gcc	acg	2611	
281	Asn	Leu	Thr	Asn	Thr	Gly	Asn	Thr	Ala	Val	Thr	Ser	Phe	Asp	Ala	Ser	
283	825		830		835												
284	gcc	gtc	acc	ggc	acg	gct	ccg	gct	gtg	acc	tcc	gtg	tcg	gcc	aac	acc	2659
285	Ala	Val	Thr	Gly	Thr	Ala	Pro	Ala	Val	Thr	Phe	Val	Ser	Ala	Asn	Thr	
287	840		845		850												
288	acg	gtg	ggt	gaa	gtc	gtc	acg	atc	cgc	ggc	gct	ggc	gcc	gac	tcg	2707	
289	Thr	Val	Gly	Glu	Val	Val	Thr	Ile	Arg	Gly	Gly	Ala	Gly	Ala	Asp	Ser	
291	855		860		865												
292	ctg	acc	ggt	tcg	gcc	acc	gcc	aat	gac	acc	atc	atc	ggt	ggc	gct	ggc	2755
293	Leu	Thr	Gly	Ser	Ala	Thr	Ala	Asn	Asp	Thr	Ile	Ile	Gly	Gly	Ala	Gly	
295	870		875		880		885										
296	gct	gac	acc	ctg	gtc	tac	acc	ggc	ggt	acg	gac	acc	tcc	acg	ggt	ggc	2803
297	Ala	Asp	Thr	Leu	Val	Tyr	Thr	Gly	Gly	Thr	Asp	Thr	Phe	Thr	Gly	Gly	
299	890		895		900												
300	acg	ggc	gcg	gat	atc	tcc	gat	atc	aac	gct	atc	ggc	acc	tcg	acc	gct	2851
301	Thr	Gly	Ala	Asp	Ile	Phe	Asp	Ile	Asn	Ala	Ile	Gly	Thr	Ser	Thr	Ala	
303	905		910		915												
304	tcc	gtg	acg	atc	acc	gac	gcc	gct	gtc	ggc	gac	ctc	gac	ctc	gtc	2899	
305	Phe	Val	Thr	Ile	Thr	Asp	Ala	Ala	Val	Gly	Asp	Lys	Leu	Asp	Leu	Val	
307	920		925		930												
308	ggc	atc	tcg	acg	acc	ggc	gct	atc	gct	gac	ggc	gcc	tcc	ggc	gct	gcg	2947
309	Gly	Ile	Ser	Thr	Asn	Gly	Ala	Ile	Ala	Asp	Gly	Ala	Phe	Gly	Ala	Ala	
311	935		940		945												
312	gtc	acc	ctg	ggc	gct	gct	gcg	acc	ctg	gct	cag	tac	ctg	gac	gct	gct	2995
313	Val	Thr	Leu	Gly	Ala	Ala	Ala	Thr	Leu	Ala	Gln	Tyr	Leu	Asp	Ala	Ala	
315	950		955		960		965										
316	gct	gcc	ggc	gac	ggc	acc	tcg	gtt	gcc	aag	tgg	tcc	cag	ttc			3043
317	Ala	Ala	Gly	Asp	Gly	Ser	Gly	Thr	Ser	Val	Ala	Lys	Trp	Phe	Gln	Phe	
319	970		975		980												
320	ggc	ggc	gac	acc	tat	gtc	gtc	gtt	gac	acg	tcg	gct	ggc	gcg	acc	tcc	3091
321	Gly	Gly	Asp	Thr	Tyr	Val	Val	Val	Asp	Ser	Ser	Ala	Gly	Ala	Thr	Phe	
323	985		990		995												
324	gtc	agc	ggc	gct	gac	gac	gca	gtt	gtc	acc	ggt	ctg	gtc	acg	ctg		3139
325	Val	Ser	Gly	Ala	Asp	Ala	Val	Ile	Lys	Leu	Thr	Gly	Leu	Val	Thr	Leu	
327	1000		1005		1010												
328	acc	acc	tcg	gcc	tcc	gcc	acc	gaa	gtc	ctg	acg	ctc	gcc	t	aaggcaacgt		3189
329	Thr	Thr	Ser	Ala	Phe	Ala	Thr	Glu	Val	Leu	Thr	Leu	Ala				
	1015		1020		1025												

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/743,731

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Input Set : A:\08106-004001.TXT

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date